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Rec'd PCT/PTO

11 OCT 2004

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number  
**WO 2004/043980 A2**

- (51) International Patent Classification<sup>7</sup>: **C07H**
- (21) International Application Number:  
PCT/US2003/035672
- (22) International Filing Date:  
5 November 2003 (05.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/424,784 7 November 2002 (07.11.2002) US
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BGL6 BETA-GLUCOSIDASE AND NUCLEIC ACIDS ENCODING THE SAME

MGEWQEQMMG	FDVEDVLSQL	SQNEKIALLS	GIDFWHTYPI	PKYNVPSVRL	50
TDGPNGIRGT	KFFAGIPAAC	LPCGTALAST	WDKQLLKKAG	KLLGDECIAC	100
GAHCWLGP	NTPRSPLGGR	GFESFSEDPY	LSGILAASMI	LGCESTGVIS	150
AVKHVANDQ	EHERRAVDCL	ITQALREVY	LRPFQIVARD	ARPGALMTSY	200
NKVNGKHVAD	SAEFLQGILR	TEWNWDPLIV	SDWYGYTTI	DAIKAGLDLE	250
MPGVSRYRGK	YIESALQARL	LKQSTIDERA	RRVLRFAQKA	SHLKVSEVEQ	300
GRDFPEDRVL	NRQICGSSIV	LLKNENSILP	LPKSVKKVAL	VGSHVRLPAI	350
SGGGSASLVP	YYAISLYDAV	SEVLGATIT	HEVGAYAHQM	LPVIDAMISN	400
AVIHFYNDPI	DVKDRKLLGS	ENVSSTSFQL	MDYNNIPTLN	KAMFWGTLVG	450
EFIPTATGIW	EFGLSVFGTA	DLYIDNELVI	ENTTHQTRGT	AFFGKGTTTEK	500
VATRRMVAGS	TYKLRLEFGS	ANTTKMETTG	VVNFGGGAVH	LGACLKVDPO	550
EMIAARVCAA	ADADYTIICT	GLSGEWESEG	FDRPHMDLPP	GVDTMISQVL	600
DAAPNAVVVN	QSGTPVTMSW	AHKAKAIVQA	WYGGNETGHG	ISDVLFGNVN	650
PSGKLSLW	VDVKHNPAYL	NYASVGGVRL	YGEDVYVGK	FYDKTEREVL	700
FPGHGLSYA	TFKLDPSTVR	TVPETFHPDQ	PTVAIVKIKN	TSSVPGAQVL	750
QLYISAPNSP	THRPVKELHG	FEKVYLEAGE	EKEVQIPIDQ	YATSFWDEIE	800
SMWKSERGIY	DVLVGFSSQE	ISGKGKLIVP	ETRFWMGL		838

(57) Abstract: The present invention provides a novel  $\beta$ -glucosidase nucleic acid sequence, designated *bgl6*, and the corresponding BGL6 amino acid sequence. The invention also provides expression vectors and host cells comprising a nucleic acid sequence encoding BGL6, recombinant BGL6 proteins and methods for producing the same.

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